INTERSTATE POLLUTION CONTROL/ROTO ROOTER
National Priority List, HRS Score: 46.01
PRP Meeting, July 16, 1990

SITE DESCRIPTION:

Interstate Pollution Control (IPC)/Roto Rooter site is located within the city of Rockford, Winnebago County, Illinois. Specifically, IPC/Roto Rooter is located adjacent to the northwest intersection of Peoples and Magnolia Avenues. The site is bordered on the west by Quakers Oats (closed factory); on the north by a dirt road and an old quarry pond (Gunite Pond); on the east by Magnolia Avenue; and on the south by a railroad spur and Peoples Avenue. The site encompasses approximately 4.5 acres and currently contains 5-6 underground storage tanks (UST's), one above ground storage tank and two buildings.

SITE HISTORY:

IPC/Roto Rooter initiated operations of this facility June of 1971 as an oil waste recycler, industrial waste storage facility and hauler. Tanks were installed prior to June of 1971 and had the capacity of holding 400,000 gallons of waste oil and cyanide. During 1971, IPC/Roto Rooter handled extensive amounts of cyanide shipments which were stored on site and later shipped to Conservation Chemical. On October of 1971, a cyanide incinerator was installed and operating on site, the incinerator was capable of burning 3,500 gallons of cyanide waste per week.

Over the years of operation, this site received millions of gallons of waste oils including solvents, cyanide wastes, acids and bases. Storage and handling of the wastes were poorly managed on-site, this is well documented through IEPA's FOS files. On one occasion, mixing of incompatible wastes occurred (Chromic acids and cyanide sludges within UST) causing a extremely hazardous situation. A cyanide lagoon was established during the late 1970's for the purpose of waste cyanide storage. The lagoon resulted in undetermined amounts of hazardous wastes to infiltrate into the local groundwater. IPC/Roto Rooter also used waste oils for dust control of neighboring roads and Peoples Avenue Landfill.

IPC/Roto Rooter was brought before the Pollution Control Board in 1980 (PCB-80-21), for the improper and illegal operations of this facility and also to address the cyanide lagoon on-site. IPC/Roto Rooter initiated a partial clean-up of the site in 1979 through 1980 involving removal of the hundreds of drums of waste oil, several tankers containing wastes, cyanide lagoon contents and approximately 120 yards of cyanide contaminated soil.

Through IEPA manifests, it is also well documented that this site received wastes into 1984. However, there is no

documentation of shipments past 1984, but it is believed that IPC/Roto Rooter may have utilized the UST tanks until 1989.

Sine the IEPA manifest system commenced in October, 1979, it is recorded that approximately 5,500,000 gallons of hazardous waste was transported to the site along with approximately 500,000 gallons of non-hazardous waste. IEPA believes the total amount of wastes transported to the site from 1971 could be double of that recorded on manifests.

SITE CONTAMINATION:

The local aquifer has been determined contaminated through the results of the study performed by Ecology & Environment completed on April 30, 1986. The study includes groundwater analysis from three separate sampling events; IEPA Samples/ 4-26-83, FIT Samples of 8-14-84 and 4-25-85, (see enclosed Tables 7 & 8 from study). The chemical analysis shows that there are nine volatile organic's that both appeared at IPC and Peoples Avenue Landfill. Heavy metals were detected sporadically throughout the monitoring events.

The study also concluded besides that of the nine compounds shown on table 8, one volatile organic compound could be only linked coming from Peoples Avenue Landfill, (benzene); and two VOC's could be linked with IPC/Roto Rooter, (1,1-dichloroethene, chloroform).

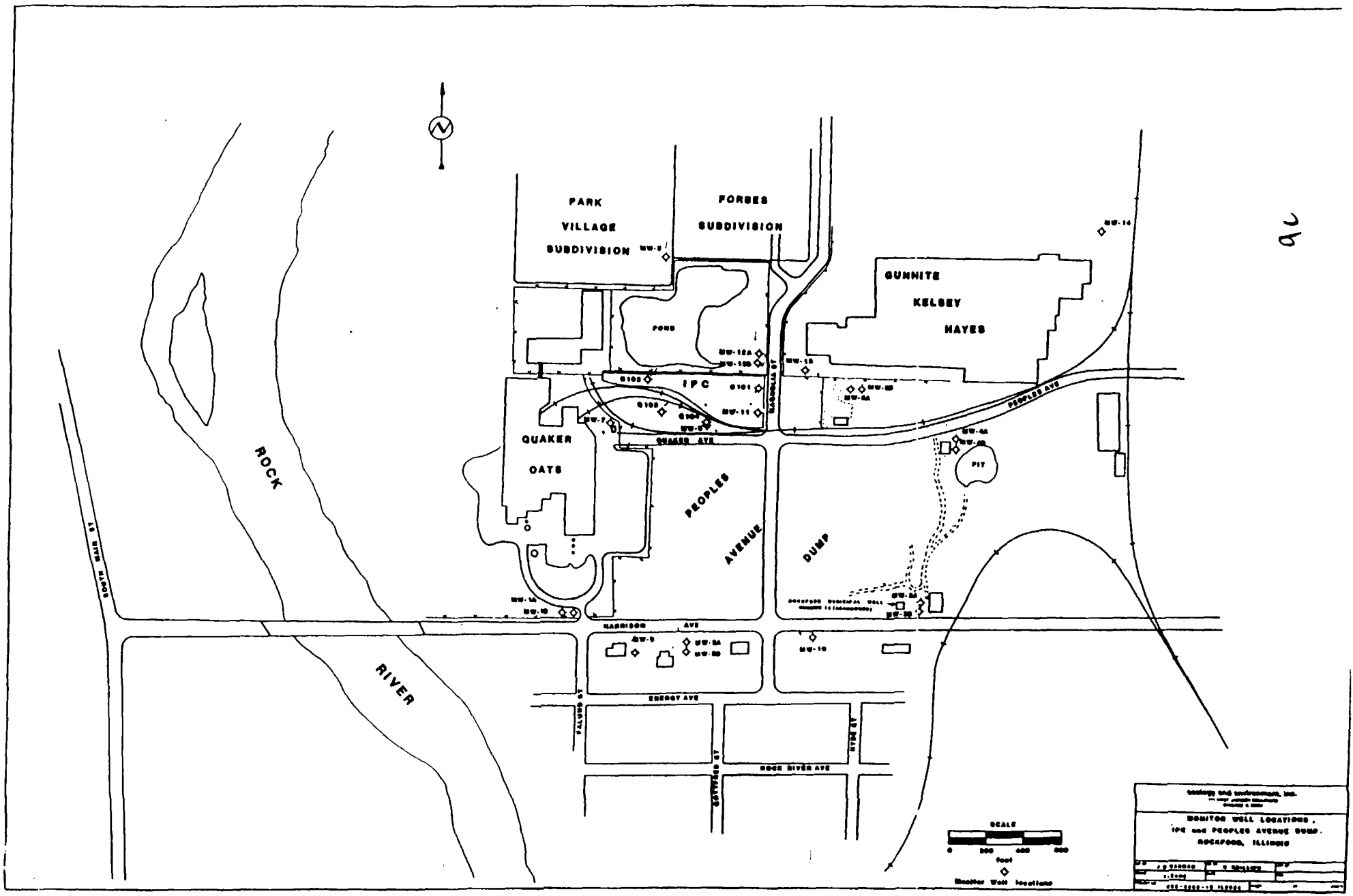
PARK
VILLAGE
SUBDIVISION
FORBES
SUBDIVISION
GUNNITE
KELSEY
HAYES
POND
IPC
QUAKER
OATS
PEOPLES
AVENUE
DUMP
PIT
ROCK
RIVER
QUAKER AVE
PEOPLES AVE
HARRISON AVE
ROCK RIVER AVE
SCALE
Monitor Well locations
MONITOR WELL LOCATIONS,
IPC and PEOPLES AVENUE DUMP,
ROCKFORD, ILLINOIS

TABLE 7
COMPARISON OF VOLATILE ORGANIC COMPOUNDS
DETECTED IN GROUNDWATER SAMPLES COLLECTED
DURING THREE SAMPLING EPISODES AT WELLS
IN AND AROUND IPC
CONCENTRATIONS REPORTED IN ug/l (ppb)

	I.E.P.A. SAMPLES 4-26-83				FIT SAMPLES 8-14-84					FIT SAMPLES 4-25-85				
	G-101	G-102	G-103	G-104	G-101	G-102	G-103	Dup. G-103	G-104	G-101	Dup. G-101	G-102	G-103	G-104
Vinyl Chloride	NA	NA	NA	NA	-	-	-	-	53.5	110	100	-	-	88
Chloroethane	NA	NA	NA	NA	-	-	-	-	-	89	92	-	-	-
1,1 Dichloroethene	NA	NA	NA	NA	-	-	-	-	-	-	-	-	-	27
1,1 Dichloroethane	630	13	74	4	220	18.3	71.2	123	1070	890	940	-	10	2400
Trans-1,2 Dichloroethene	3	22	62	77	19.3	20.1	82.7	146	1280	-	-	13	30	1500
Chloroform	-	-	2	2	-	-	-	-	25.4	-	-	-	-	27
1,1,1 Trichloroethane	28	9	860	350	47.5	28.4	144	205	1140	270	250	-	37	2100
Trichloroethene	2	2	30	62	12.3	-	17.5	30.8	99.6	20	20	-	5.1	130
Tetrachloroethene	5	-	2	8	8.6	19.5	15.6	21.8	16.5	17	16	-	6.3	47

Note: NA = Not Analyzed for
- = Analyzed for but not detected

TABLE 8

COMPARISON OF INORGANIC COMPOUNDS
DETECTED IN GROUNDWATER SAMPLES
COLLECTED DURING THREE SAMPLING EPISODES
FROM WELLS IN AND AROUND IPC
CONCENTRATIONS REPORTED IN mg/l (ppm)

	IEPA SAMPLES 4-26-83				FIT SAMPLES 8-14-84					FIT SAMPLES 4-25-85				
	G-101	G-102	G-103	G-104	G-101	G-102	G-103	Dup. G-103	G-104	G-101	Dup. G-101	G-102	G-103	G-104
Aluminum												5.1		
Antimony														
Arsenic	.007	.001		.002	.007									
Barium	.30			.20	.082	.085	.05	.05	.138					
Beryllium														
Cadmium														
Calcium	94.6	79.2	111	111	136	80	98.9	100	138	102.6	101	85.82	63.1	106.4
Chromium			.04				.049	.055	.009			02.7	.081	
Cobalt									.017					
Copper	.01	.01	.03	.04			.008	.006	.025			.07		.03
Iron	3.1						.092			.696	.638	9.88	.165	
Lead									.094	.008	.008	.023		
Magnesium	40.2	37.1	43.5	43.8	54.5	45.7	41.8	42.1	50.9	50.24	48.82	47.47	31.12	32.41
Manganese	.21	.16	.01	.91	.266	.126	.012	.011	1.6	.404	.411	.706		.501
Mercury									.0002					
Nickel	.20				.033				.071	.062	.057			
Potassium	93.6	3.3	3.1	15.4	13.5	3.47	3.32	3.0	7.1	27.42	22.99	5.93		
Selenium		.001	.001									.008		
Silver														
Sodium	292	17.3	21.8	46	60.8	19.9	32.3	32.6	85.8	100.9	94.96	664.3	32.66	89.79
Thallium														
Tin														
Vanadium														
Zinc							.042			.082	.089	.086	.044	.045
Cyanide	.01				.009	.024	.027	.037	.019					